

RESPONSE TO OFFICE ACTION
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1. (Currently Amended) Apparatus for gas distribution in a semiconductor wafer processing chamber comprising:
 - a roof fabricated from a silicon-based material and having a center gas feed;
 - a recess disposed within said roof;
 - a gas distribution plate disposed within said recess and having a first side facing the roof;
 - a plurality of blind radial grooves formed in the first side of the gas distribution plate, the grooves being in fluid communication with the center gas feed; and
 - a plurality of apertures disposed within said grooves and extending through the gas distribution plate.
2. (Withdrawn) The apparatus of claim 1 wherein the recess is disposed on a top surface of the roof.
3. (Withdrawn) The apparatus of claim 2 wherein a seal circumscribes gas distribution plate.
4. (Withdrawn) The apparatus of claim 2 wherein the roof further comprises a plurality of grooves formed in the recess.
5. (Withdrawn) The apparatus of claim 4 wherein the plurality of apertures disposed with the roof extend from each of said plurality of grooves into a bottom surface of the roof.
6. (Original) The apparatus of claim 1 wherein the roof is fabricated from silicon carbide.

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7. (Original) The apparatus of claim 1 wherein the gas distribution plate is fabricated from silicon carbide.
8. (Original) The apparatus of claim 1 wherein the recess is formed on a bottom surface of the roof.
9. (Original) The apparatus of claim 8 wherein a gas feed channel extends from the top surface of the roof to the recess.
10. (Original) The apparatus of claim 8 wherein the bottom surface of the roof and the gas distribution plate are covered by a material layer.
11. (Original) The apparatus of claim 10 wherein the material layer is silicon carbide.
12. (Original) The apparatus of claim 11 wherein the material layer is deposited by chemical vapor deposition (CVD).
13. (Original) The apparatus of claim 10 wherein the material layer further comprises a plurality of apertures disposed therein.
- 14-15. (Cancelled)
16. (Original) The apparatus of claim 8 wherein the roof is fabricated from silicon carbide.
17. (Original) The apparatus of claim 8 wherein the gas distribution plate is fabricated from silicon carbide.

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18. (Currently Amended) Apparatus for gas distribution in a semiconductor wafer processing chamber comprising:

a roof having a top surface and a bottom surface and having a center gas feed;

a recess disposed within the bottom surface of said roof;

a gas distribution plate disposed within said recess and having a first side facing the roof;

a plurality of blind radial grooves formed in the first side of the gas distribution plate, the grooves being in a fluid communication with the center gas feed and having a plurality of apertures disposed within said grooves, the apertures extending through the gas distribution plate; and

a material layer coating disposed upon the bottom surface of the roof and the gas distribution plate.

19. (Original) The apparatus of claim 18 wherein the material layer coating further comprises a plurality of apertures.

20. (Cancelled)

21. (Previously Amended) The apparatus of claim 18 wherein the apertures in the gas distribution plate coincide with the apertures in the material layer coating.

22. (Original) The apparatus of claim 18 wherein the material layer coating is formed from silicon carbide.

23. (Original) The apparatus of claim 18 wherein the material layer is deposited by chemical vapor deposition (CVD).

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24. (Original) The apparatus of claim 18 wherein the roof is fabricated from silicon carbide.
25. (Original) The apparatus of claim 18 wherein the gas distribution plate is fabricated from silicon carbide.
26. (Previously Presented) The apparatus of claim 13 wherein the apertures of the gas distribution plate coincide with the apertures in the material layer.

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